

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Spring 2017 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
† Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection
Reports may effect overall annual rating.

† SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

Waterway			Bank	Unit Miles
Unit No. 01 Willow Slough Bypass or North Levee			Left	5.05
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/18/2017 - 4/18/2017			
DWR Inspector	Zach Jojola			
Accompanied By	Casey Lund			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start		Rating **	A	Issue No.	6
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Operations & Maintenance Manuals			°	°
				°	°
DWR ID	DWR_ST0012_01_s _ 2013_6				
Comment Code					
Inspector Comment					
Sacramento Maintenance Yard has copies of their O&M manuals.					

No Photos

LM Start		Rating **	A	Issue No.	7
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Emergency Supplies & Equipment			°	°
				°	°
DWR ID	DWR_ST0012_01_s _ 2013_7				
Comment Code					
Inspector Comment					
Sacramento Maintenance Yard has a stockpile of flood response material.					

No Photos

LM Start		Rating **	A	Issue No.	8
LM End		Issue Type +	Ma	Location *	N/A
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_ST0012_01_s _ 2013_8				
Comment Code					
Inspector Comment					
Sacramento Maintenance Yard has a written flood response plan and flood fight training.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	0.00	Rating **	M	Issue No.	17
LM End	0.06	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.590772 °	38.590758 °
				-121.665343 °	-121.666370 °
DWR ID	DWR_ST0012_01_s _ 2017_17				
Comment Code					
FE : Fence					
Inspector Comment					
Chain link fence.					

No Photos

LM Start	0.09	Rating **	U	Issue No.	19
LM End	3.51	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.590764 °	38.590766 °
				-121.666949 °	-121.730034 °
DWR ID	DWR_ST0012_01_s _ 2017_19				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_19_20170419_00018.jpg



Tall grass on landside levee slope, blocking visibility. Spring 2017.

LM Start	0.56	Rating **	U	Issue No.	20
LM End	3.51	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.590585 °	38.590767 °
				-121.675592 °	-121.730035 °
DWR ID	DWR_ST0012_01_s _ 2017_20				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_20_20170419_00019.jpg



Tall grass on waterside levee slope, blocking visibility. Spring 2017.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	0.90	Rating **	A/W	Issue No.	16
LM End	0.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.590456 °	38.590456 °
				-121.681952 °	-121.681952 °
DWR ID	DWR_ST0012_01_f_ 2015_16				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					

Photo 1 of 3 : SP_2017_ST0012_295_16_20170320_00014.jpg



View of the dessication cracking on the landward side of the levee. Fall 2015.

LM Start	0.90	Rating **	A/W	Issue No.	16 (cont)
LM End	0.90	Issue Type +	Ma	Location *	LS

Photo 2 of 3 : SP_2017_ST0012_295_16_20170320_00015.jpg



Perspective view of the crack looking downstream. Fall 2015.

LM Start	0.90	Rating **	A/W	Issue No.	16 (cont)
LM End	0.90	Issue Type +	Ma	Location *	LS

Photo 3 of 3 : SP_2017_ST0012_295_16_20170320_00016.jpg



View of the crack on the landward side of the levee looking upstream. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	1.53	Rating **	M	Issue No.	14
LM End	2.20	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.590334 °	38.590466 °
				-121.693618 °	-121.705849 °
DWR ID	DWR_ST0012_01_f_2016_14				
Comment Code					
FE : Fence					
Inspector Comment					
No record of a permit related to this fence found in levee log.					

Photo 1 of 1 : SP_2017_ST0012_295_14_20170320_00010.jpg



View of fence encroaching 10-foot easement on landward side of the levee. Fall 2016.

LM Start	1.65	Rating **	C	Issue No.	9
LM End	1.65	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.590408 °	38.590408 °
				-121.695755 °	-121.695755 °
DWR ID	DWR_ST0012_01_f_2016_9				
Comment Code					
DE : Debris					
Inspector Comment					

No Photos

LM Start	1.86	Rating **	A/W	Issue No.	15
LM End	1.88	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.590378 °	38.590379 °
				-121.699630 °	-121.699920 °
DWR ID	DWR_ST0012_01_f_2015_15				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
Cracks starting to form on the waterward slope.					

Photo 1 of 3 : SP_2017_ST0012_295_15_20170320_00011.jpg



Perspective view of the crack on the crown of the levee looking downstream. Fall 2015.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	1.86	Rating **	A/W	Issue No.	15 (cont)	
LM End	1.88	Issue Type +	Ma	Location *	CR	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Cracking			38.590378 °		38.590379 °
				-121.699630 °		-121.699920 °
DWR ID	DWR_ST0012_01_f_ 2015_15					
Comment Code						
CR1 : Monitor and have inspected by geotechnical engineer.						
Inspector Comment						
Cracks starting to form on the waterward slope.						

Photo 2 of 3 : SP_2017_ST0012_295_15_20170320_00012.jpg



Cracks are starting to form on the waterward slope of the levee looking downstream. Fall 2015.

LM Start	1.86	Rating **	A/W	Issue No.	15 (cont)
LM End	1.88	Issue Type +	Ma	Location *	CR

Photo 3 of 3 : SP_2017_ST0012_295_15_20170320_00013.jpg



There is another crack perpendicular to the crack on the levee crown. Fall 2015.

LM Start	2.02	Rating **	M	Issue No.	5
LM End	2.02	Issue Type +	En	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.590381 °	38.590381 °
				-121.702554 °	-121.702554 °
DWR ID	DWR_ST0012_01_f_ 2016_5				
Comment Code					
DE : Debris					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_5_20170320_00003.jpg



Downed tree on waterside slope looking downstream. Fall 2016.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	2.93	Rating **	M	Issue No.	10
LM End	3.00	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.590572 °	38.590653 °
				-121.719349 °	-121.720714 °
DWR ID	DWR_ST0012_01_s_2015_10				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Area is known to erode and may be because of the material of the levee.					

Photo 1 of 1 : SP_2017_ST0012_295_10_20170320_00005.jpg



View of the erosion on the landward side of the levee looking upstream. Fall 2015.

LM Start	3.36	Rating **	M	Issue No.	13
LM End	3.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.590620 °	38.590620 °
				-121.727385 °	-121.727385 °
DWR ID	DWR_ST0012_01_s_2016_13				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_13_20170320_00009.jpg



View of the ruts created by vehicles on the crown of the levee looking downstream. Spring 2016.

LM Start	3.50	Rating **	M	Issue No.	3
LM End	3.50	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.590731 °	38.590731 °
				-121.729906 °	-121.729906 °
DWR ID	DWR_ST0012_01_f_2016_3				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_3_20170320_00001.jpg



Ruts on levee crown due to vehicular activity. Fall 2016.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	3.54	Rating **	M	Issue No.	18
LM End	3.54	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.590685 °	38.590685 °
				-121.730657 °	-121.730657 °
DWR ID	DWR_ST0012_01_s_2016_18				
Comment Code					
C2 : Repair depressions or ruts in the crown or slope.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_18_20170320_00017.jpg



View of the ruts caused by vehicles on the crown of the levee looking downstream. Spring 2016.

LM Start	3.55	Rating **	U	Issue No.	21
LM End	5.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.590704 °	38.599981 °
				-121.730787 °	-121.753014 °
DWR ID	DWR_ST0012_01_s_2017_21				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_21_20170419_00020.jpg



Tall grass on waterside levee slope, blocking visibility. Spring 2017.

LM Start	3.55	Rating **	U	Issue No.	22
LM End	5.04	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.590704 °	38.599981 °
				-121.730787 °	-121.753014 °
DWR ID	DWR_ST0012_01_s_2017_22				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_295_22_20170419_00021.jpg



Tall grass on landside levee slope, blocking visibility. Spring 2017.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	3.90	Rating **	A/W	Issue No.	12
LM End	3.90	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.594149 °	38.594149 °
				-121.735254 °	-121.735254 °
DWR ID	DWR_ST0012_01_f_2015_12				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
The sinkholes are caused by the material of the levee and runoffs. These are not rodent holes.					

LM Start	3.90	Rating **	A/W	Issue No.	12 (cont)
LM End	3.90	Issue Type +	Ma	Location *	LS

Photo 1 of 2 : SP_2017_ST0012_295_12_20170320_00007.jpg



View of the sinkholes on the landward side of the levee looking downstream. Fall 2015.

Photo 2 of 2 : SP_2017_ST0012_295_12_20170320_00008.jpg



View of the sinkholes on the landward side of the levee. Sinkholes are caused due to material of the levee and runoffs. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	3.94	Rating **	A/W	Issue No.	11
LM End	3.94	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.594645 °	38.594645 °
				-121.735712 °	-121.735712 °
DWR ID	DWR_ST0012_01_f_2015_11				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					
The sinkholes are caused by the material of the levee and runoffs. These are not rodent holes.					

Photo 1 of 1 : SP_2017_ST0012_295_11_20170320_00006.jpg



View of the sinkholes on the landward side of the levee looking downstream. Fall 2015.

LM Start	4.12	Rating **	M	Issue No.	4
LM End	4.60	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.596784 °	38.599845 °
				-121.737662 °	-121.744830 °
DWR ID	DWR_ST0012_01_s_2012_4				
Comment Code					
DT : Ditch					
Inspector Comment					
Ditch is at the levee toe.					

Photo 1 of 1 : SP_2017_ST0012_295_4_20170320_00002.jpg



View of the ditch on the landward side of the levee looking downstream. Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Willow Slough Bypass or North Levee	Left	5.05	04/18/2017 04/18/2017	Zach Jojola

LM Start	4.30	Rating **	M	Issue No.	23
LM End	4.30	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.598840 °	38.598840 °	
			-121.739600 °	-121.739600 °	
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:29303 DS_ID:17684 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 09/19/2012 PG&E may provide further info. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 8-inch gas line of unknown material through both levees. (Pacific Gas and Electric Co. [PG&E]). [Additional Reference(s): USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 1 (Station 46+50)] FS Date: 5/28/2013 2:36:00 PM					

No Photos

LM Start	5.07	Rating **	M	Issue No.	24
LM End	5.07	Issue Type +	En	Location *	LS
Category	Supplemental		GPS Latitude/Longitude		
			Start	End	
Item	DWR UCIP Field Study		38.599940 °	38.599940 °	
			-121.753530 °	-121.753530 °	
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:44951 DS_ID:17667 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 05/28/2013 No markers or other indication of pipe location. Needs to be marked. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. (Permit No. 15811, unknown year constructed - Shell Western E&P Inc.) FS Date: 5/5/2015 8:40:19 AM					

No Photos

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2017 Levee Inspection Results

Sacramento Maintenance Yard Willow Slough Bypass

Waterway			Bank	Unit Miles
Unit No. 02 Willow Slough Bypass or South Levee			Right	7.46
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	4/18/2017 - 4/18/2017			
DWR Inspector	Zach Jojola			
Accompanied By	Casey Lund			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

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If additional items are noted, further documentation of those items must also be submitted.

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<http://cdec.water.ca.gov/lma.html>

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	0.03	Rating **	U	Issue No.	12
LM End	0.69	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.599035 °	38.598985 °
				-121.753915 °	-121.741674 °
DWR ID	DWR_ST0012_02_s_2017_12				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_12_20170419_00037.jpg



Tall grass on waterside levee slope, blocking visibility. Spring 2017.

LM Start	0.03	Rating **	U	Issue No.	6
LM End	0.69	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.599035 °	38.598985 °
				-121.753915 °	-121.741673 °
DWR ID	DWR_ST0012_02_s_2017_6				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_6_20170419_00038.jpg



Tall grass on landside levee slope, blocking visibility. Spring 2017.

LM Start	0.07	Rating **	M	Issue No.	13
LM End	0.07	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.599117 °	38.599117 °
				-121.753264 °	-121.753264 °
DWR ID	DWR_ST0012_02_s_2017_13				
Comment Code					
EQ : Equipment					
Inspector Comment					
Beehives on landside slope.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	0.07	Rating **	M	Issue No.	38
LM End	0.07	Issue Type +	En	Location *	LS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.599100 °	38.599100 °
				-121.753260 °	-121.753260 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:45283 DS_ID:17703 EP_NO: 15811 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: 05/10/2017 Unable to find permit file to clarify if crossing was constructed. (DWR UCIP - O. Magana) 05/24/2013 Need to contact owner of pipe to place indicators on levee. (DWR Sacramento Yard - C. Lund) FIELD_STRUCT_DESC: Replace existing 4-inch diameter natural gas pipeline with an 8-inch diameter natural gas pipeline under the channel and within both banks of Willow Slough. (Permit No. 15811, unknown year - Shell Western E&P Inc.) FS Date: 5/14/2015 1:35:47 PM					

No Photos

LM Start	0.29	Rating **	M	Issue No.	7
LM End	0.40	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.598993 °	38.599045 °
				-121.749130 °	-121.747107 °
DWR ID	DWR_ST0012_02_s_ 2014_7				
Comment Code					
DT : Ditch					
Inspector Comment					
The ditch is located at the levee toe.					

Photo 1 of 2 : SP_2017_ST0012_296_7_20170320_00005.jpg



An updated view of the ditch near LM 0.29. Fall 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	0.29	Rating **	M	Issue No.	7 (cont)	
LM End	0.40	Issue Type +	En	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Encroachments			38.598993 °		38.599045 °
				-121.749130 °		-121.747107 °
DWR ID	DWR_ST0012_02_s_2014_7					
Comment Code						
DT : Ditch						
Inspector Comment						
The ditch is located at the levee toe.						

Photo 2 of 2 : SP_2017_ST0012_296_7_20170320_00006.jpg



View of the ditch on the landward side of the levee looking downstream. Spring 2016.

LM Start	0.40	Rating **	M	Issue No.	26
LM End	0.56	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.599045 °	38.599033 °
				-121.747108 °	-121.744180 °
DWR ID	DWR_ST0012_02_f_2016_26				
Comment Code					
AT : Agricultural tilling					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_26_20170320_00033.jpg



View of a tilling issue at LS levee toe near LM 0.40 where ditch ends. Fall 2016.

LM Start	0.69	Rating **	M	Issue No.	27
LM End	1.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.598985 °	38.590114 °
				-121.741673 °	-121.731301 °
DWR ID	DWR_ST0012_02_s_2017_27				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	0.69	Rating **	M	Issue No.	28
LM End	1.57	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.598985 °	38.590064 °
				-121.741673 °	-121.730723 °
DWR ID	DWR_ST0012_02_s_2017_28				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	1.21	Rating **	A/W	Issue No.	23	
LM End	1.21	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.593368 °		38.593368 °
				-121.735605 °		-121.735605 °
DWR ID	DWR_ST0012_02_f_2016_23					
Comment Code						
E1 : Note and monitor erosion site.						
Inspector Comment						
Erosion on waterward side at utility crossing. Doesn't appear to be within prism, but should be monitored.						

Photo 1 of 1 : SP_2017_ST0012_296_23_20170320_00029.jpg



View of an erosion site around UCIP pipe FSID 13725 on waterward side of the levee. Fall 2016.

LM Start	1.54	Rating **	M	Issue No.	21
LM End	1.54	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.590108 °	38.590108 °
				-121.731254 °	-121.731254 °
DWR ID	DWR_ST0012_02_s_2017_21				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					
Rills on landside levee slope.					

Photo 1 of 1 : SP_2017_ST0012_296_21_20170419_00039.jpg



View of rills on landside levee slope. Spring 2017.

*** Location**
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**
A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	1.57	Rating **	M	Issue No.	29	
LM End	1.57	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Slope Stability			38.590064 °		38.590064 °
				-121.730723 °		-121.730723 °
DWR ID	DWR_ST0012_02_s_2017_29					
Comment Code						
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.						
Inspector Comment						
Tire damage on landside levee slope.						

Photo 1 of 1 : SP_2017_ST0012_296_29_20170419_00040.jpg



View of tire damage on landside levee slope. Spring 2017.

LM Start	1.65	Rating **	M	Issue No.	30
LM End	6.67	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.589986 °	38.580482 °
				-121.729360 °	-121.647563 °
DWR ID	DWR_ST0012_02_s_2017_30				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	1.65	Rating **	M	Issue No.	31
LM End	6.67	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.589986 °	38.580481 °
				-121.729360 °	-121.647563 °
DWR ID	DWR_ST0012_02_s_2017_31				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	1.77	Rating **	M	Issue No.	8
LM End	1.77	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589966 °	38.589966 °
				-121.727072 °	-121.727072 °
DWR ID	DWR_ST0012_02_s_2012_8				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_8_20170320_00007.jpg



View of the erosion on the edge of the channel looking downstream. Fall 2015.

LM Start	2.04	Rating **	A/W	Issue No.	5
LM End	2.04	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589906 °	38.589906 °
				-121.722218 °	-121.722218 °
DWR ID	DWR_ST0012_02_s_2012_5				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 2 : SP_2017_ST0012_296_5_20170320_00003.jpg



View of the erosion on the edge of the channel on the waterward side of the levee looking downstream. Fall 2015.

LM Start	2.04	Rating **	A/W	Issue No.	5 (cont)
LM End	2.04	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2017_ST0012_296_5_20170320_00004.jpg



View of the erosion on the edge of the channel on the waterward side of the levee looking downstream. Spring 2016.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	2.25	Rating **	A/W	Issue No.	19
LM End	2.25	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589845 °	38.589845 °
				-121.718292 °	-121.718292 °
DWR ID	DWR_ST0012_02_f_2015_19				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion creeping onto toe road.					

Photo 1 of 2 : SP_2017_ST0012_296_19_20170320_00023.jpg



View of the erosion at the edge of the channel on the waterward side of the levee looking downstream. Fall 2015.

LM Start	2.25	Rating **	A/W	Issue No.	19 (cont)
LM End	2.25	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2017_ST0012_296_19_20170320_00024.jpg



View of the erosion at the edge of the channel on the waterward side of the levee looking downstream. Spring 2016.

* Location
LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

** Rating
A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type
Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	2.73	Rating **	A/W	Issue No.	20
LM End	2.73	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589707 °	38.589707 °
				-121.709429 °	-121.709429 °
DWR ID	DWR_ST0012_02_f_2015_20				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					
Erosion starting to creep onto the toe road.					

Photo 1 of 1 : SP_2017_ST0012_296_20_20170320_00025.jpg



View of the erosion at the edge of the channel looking downstream. Fall 2015.

LM Start	2.82	Rating **	A/W	Issue No.	10
LM End	2.82	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589691 °	38.589691 °
				-121.707740 °	-121.707740 °
DWR ID	DWR_ST0012_02_f_2014_10				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 2 : SP_2017_ST0012_296_10_20170320_00011.jpg



Erosion on toe road. Fall 2014.

LM Start	2.82	Rating **	A/W	Issue No.	10 (cont)
LM End	2.82	Issue Type +	Ma	Location *	WS

Photo 2 of 2 : SP_2017_ST0012_296_10_20170320_00012.jpg



View of the erosion on the toe road looking downstream. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	2.97	Rating **	M	Issue No.	9
LM End	2.97	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589686 °	38.589686 °
				-121.705041 °	-121.705041 °
DWR ID	DWR_ST0012_02_f_2014_9				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 3 : SP_2017_ST0012_296_9_20170320_00008.jpg



An updated view of erosion site on waterward side of the levee that keeps on growing. Fall 2016.

LM Start	2.97	Rating **	M	Issue No.	9 (cont)
LM End	2.97	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP_2017_ST0012_296_9_20170320_00009.jpg



Erosion on toe road. Fall 2014.

LM Start	2.97	Rating **	M	Issue No.	9 (cont)
LM End	2.97	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2017_ST0012_296_9_20170320_00010.jpg



View of the erosion on the waterward side of the levee looking downstream. Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	2.98	Rating **	C	Issue No.	3
LM End	2.98	Issue Type +	En	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.589666 °	38.589666 °
				-121.704729 °	-121.704729 °
DWR ID	DWR_ST0012_02_f_2016_3				
Comment Code					
SI : Sign					
Inspector Comment					

No Photos

LM Start	3.05	Rating **	C	Issue No.	16
LM End	3.05	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.589638 °	38.589638 °
				-121.703452 °	-121.703452 °
DWR ID	DWR_ST0012_02_s_2016_16				
Comment Code					
S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.					
Inspector Comment					

No Photos

LM Start	3.95	Rating **	A/W	Issue No.	18
LM End	3.95	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589508 °	38.589508 °
				-121.686850 °	-121.686850 °
DWR ID	DWR_ST0012_02_s_2016_18				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_18_20170320_00022.jpg



View of the erosion on the waterward side looking downstream. Spring 2016.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	4.18	Rating **	C	Issue No.	14
LM End	4.18	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.589516°	38.589516°
				-121.682585°	-121.682585°
DWR ID	DWR_ST0012_02_f_2016_14				
Comment Code					
GA : Garbage					
Inspector Comment					

No Photos

LM Start	4.29	Rating **	M	Issue No.	11
LM End	4.29	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589550 °	38.589550 °
				-121.680632 °	-121.680632 °
DWR ID	DWR_ST0012_02_f_2014_11				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 3 : SP_2017_ST0012_296_11_20170320_00013.jpg



An updated view of the erosion site that keeps on growing toward WS levee slope. Fall 2016.

LM Start	4.29	Rating **	M	Issue No.	11 (cont)
LM End	4.29	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP_2017_ST0012_296_11_20170320_00014.jpg



Perspective view of the site. Fall 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	4.29	Rating **	M	Issue No.	11 (cont)	
LM End	4.29	Issue Type +	Ma	Location *	WS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Erosion / Bank Caving			38.589550 °		38.589550 °
				-121.680632 °		-121.680632 °
DWR ID	DWR_ST0012_02_f_2014_11					
Comment Code						
E2 : Schedule repair of erosion site prior to the next inspection.						
Inspector Comment						

Photo 3 of 3 : SP_2017_ST0012_296_11_20170320_00015.jpg



View of the erosion at the edge of the channel on the waterward side of the levee looking downstream. Fall 2015.

LM Start	4.59	Rating **	M	Issue No.	39
LM End	4.59	Issue Type +	En	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	DWR UCIP Field Study			38.589575 °	38.589575 °
				-121.674950 °	-121.674950 °
DWR ID					
Comment Code					
Inspector Comment					
FS_ID:45285 DS_ID:546 EP_NO: 10319 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Material removed from inlet last fall. Outlet cleared. (DWR Sacramento Yard - C. Lund) 09/20/2012 Soil and debris on inlet mouth. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Flap gate is located on the waterside (WS) end. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 10319, 1974 - Bell) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 244+47)] FS Date: 5/14/2015 1:36:11 PM					

Photo 1 of 3 : UCIP_SP_2017_45285_22809.jpg



Waterside view- pipe and flap gate.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	4.59	Rating **	M	Issue No.	39 (cont)	
LM End	4.59	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
				Start	End	
Item	DWR UCIP Field Study			38.589575 °	38.589575 °	
				-121.674950 °	-121.674950 °	
DWR ID						
Comment Code						
Inspector Comment						
FS_ID:45285 DS_ID:546 EP_NO: 10319 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 04/12/2017 WS & LS - good/clear, inspected by JK, RF. (DWR Sacramento Yard - C. Lund) 05/24/2013 Material removed from inlet last fall. Outlet cleared. (DWR Sacramento Yard - C. Lund) 09/20/2012 Soil and debris on inlet mouth. (DWR UCIP - P. Amatya) FIELD_STRUCT_DESC: 24-inch corrugated metal drainage pipe through the levee, 15 feet below the crown. Flap gate is located on the waterside (WS) end. (18-inch pipe authorized under Automatic Board Order (ABO) issued as Permit No. 10319, 1974 - Bell) [Additional Reference(s): DWR Levee Log, 1990. USACE Sacramento O&M Manual Unit 120, Willow Slough Channel Relocation and Levee Construction, February 1947, Drawing No. 50-4-2281 Sheet 4 (Station 244+47)] FS Date: 5/14/2015 1:36:11 PM						

LM Start	4.59	Rating **	M	Issue No.	39 (cont)
LM End	4.59	Issue Type +	En	Location *	WS

Photo 2 of 3 : UCIP_SP_2017_45285_22811.jpg



Landside view- pipe and headwall.

Photo 3 of 3 : UCIP_SP_2017_45285_22810.jpg



Landside view- soil and debris on mouth of the inlet pipe.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	5.05	Rating **	M	Issue No.	15
LM End	5.05	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589570 °	38.589570 °
				-121.666588 °	-121.666588 °
DWR ID	DWR_ST0012_02_s_2015_15				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 3 : SP_2017_ST0012_296_15_20170320_00017.jpg



An updated view of the erosion site that keeps on growing toward WS levee slope. Fall 2016.

LM Start	5.05	Rating **	M	Issue No.	15 (cont)
LM End	5.05	Issue Type +	Ma	Location *	WS

Photo 2 of 3 : SP_2017_ST0012_296_15_20170320_00018.jpg



View of the erosion on the edge of the channel on the waterward side of the levee. Spring 2015.

LM Start	5.05	Rating **	M	Issue No.	15 (cont)
LM End	5.05	Issue Type +	Ma	Location *	WS

Photo 3 of 3 : SP_2017_ST0012_296_15_20170320_00019.jpg



View of the erosion at the edge of the channel on the waterward side of the levee looking downstream. Fall 2015.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	5.09	Rating **	A/W	Issue No.	17
LM End	5.09	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589565 °	38.589565 °
				-121.665731 °	-121.665731 °
DWR ID	DWR_ST0012_02_f_2016_17				
Comment Code					
E1 : Note and monitor erosion site.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_17_20170320_00021.jpg



View of a site that may become a larger erosion site in the future.
Waterward side of the levee looking downstream. Fall 2016.

LM Start	5.22	Rating **	M	Issue No.	4
LM End	5.22	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Encroachments			38.589572 °	38.589572 °
				-121.663432 °	-121.663432 °
DWR ID	DWR_ST0012_02_s_2017_4				
Comment Code					
TR : Tree or limb					
Inspector Comment					
Large log on waterside levee slope.					

No Photos

LM Start	5.59	Rating **	M	Issue No.	32
LM End	5.59	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589532 °	38.589532 °
				-121.656631 °	-121.656631 °
DWR ID	DWR_ST0012_02_s_2017_32				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_32_20170419_00041.jpg



View of erosion on waterside levee slope. Spring 2017.

* Location		** Rating		+ Issue Type	
LS : Land Side	N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiency	
WS : Water Side		M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence	
CR : Crown		U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	5.72	Rating **	C	Issue No.	22
LM End	5.72	Issue Type +	Ob	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.589499°	38.589499°
				-121.654098°	-121.654098°
DWR ID	DWR_ST0012_02_f_2015_22				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					

No Photos

LM Start	6.07	Rating **	M	Issue No.	33
LM End	6.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Erosion / Bank Caving			38.589045°	38.589045°
				-121.647854°	-121.647854°
DWR ID	DWR_ST0012_02_s_2017_33				
Comment Code					
E2 : Schedule repair of erosion site prior to the next inspection.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_33_20170419_00042.jpg



View of erosion into waterside levee prism. Spring 2017.

LM Start	6.16	Rating **	C	Issue No.	24
LM End	6.16	Issue Type +	Ob	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Cracking			38.587826°	38.587826°
				-121.647364°	-121.647364°
DWR ID	DWR_ST0012_02_f_2015_24				
Comment Code					
CR1 : Monitor and have inspected by geotechnical engineer.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	6.67	Rating **	U	Issue No.	34
LM End	6.81	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.580482 °	38.578447 °
				-121.647563 °	-121.647601 °
DWR ID	DWR_ST0012_02_s_2017_34				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_34_20170419_00043.jpg



Tall vegetation on waterside levee slope, blocking visibility. Spring 2017.

LM Start	6.67	Rating **	U	Issue No.	35
LM End	6.81	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.580482 °	38.578447 °
				-121.647563 °	-121.647601 °
DWR ID	DWR_ST0012_02_s_2017_35				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : SP_2017_ST0012_296_35_20170419_00044.jpg



Tall grass on landside levee slope, blocking visibility. Spring 2017.

LM Start	6.81	Rating **	M	Issue No.	37
LM End	7.45	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.578446 °	38.574403 °
				-121.647600 °	-121.638751 °
DWR ID	DWR_ST0012_02_s_2017_37				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable		N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2017

Sacramento Maintenance Yard Willow Slough Bypass

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Willow Slough Bypass or South Levee	Right	7.46	04/18/2017 04/18/2017	Zach Jojola

LM Start	6.81	Rating **	M	Issue No.	36
LM End	7.45	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.578446 °	38.574402 °
				-121.647600 °	-121.638751 °
DWR ID	DWR_ST0012_02_s_2017_36				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

LM Start	7.15	Rating **	M	Issue No.	25
LM End	7.46	Issue Type +	Ma	Location *	CR
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Crown Surface / Depressions / Rutting			38.574860 °	38.574293 °
				-121.644047 °	-121.638713 °
DWR ID	DWR_ST0012_02_s_2016_25				
Comment Code					
C3 : Add appropriate gravel or road base. Grade and compact.					
Inspector Comment					
Crown needs to be regraded.					

Photo 1 of 1 : SP_2017_ST0012_296_25_20170320_00032.jpg



View of the crown of the levee looking downstream. Road needs to be regraded. Spring 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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